

Appl. No. 10/695,941  
Amdt. Dated December 4, 2007  
Response to Office Action of September 4, 2007

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### REMARKS/ARGUMENTS

#### Introduction

Receipt of the non-final Office Action mailed September 4, 2007 is acknowledged. By way of the present amendment, claims 1-4, 6-9, 11-13 and 15-18 are pending. Claims 5, 10, 14 and 19 are canceled. Claims 11 and 18 are amended.

#### Claim Amendments

Claim 11 is amended to depend from claim 8 instead of canceled claim 10.

Claim 18 is amended to recite an additive in admixture with cellulose hydrate.

Claim 18 is further amended to recite that the additive comprises a copolymer comprising units of vinylpyrrolidone and units of at least one comonomer, said comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and  $\alpha,\beta$ -ethylenically unsaturated carboxylic acid. These amendments are supported by the original specification and previous claim 1, for example.

No new matter has been added.

#### Claim Objections

Claim 11 is objected to for depending from canceled claim 10. Claim 10 has been amended to depend from claim 8. Withdrawal of the objection is therefore respectfully requested.

#### Claim Rejections – 35 U.S.C. §103

- I. *Rejection of claims 1 -4, 6 -12, 15 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634)*

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Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-4, 6-12, 15 and 17 as being unpatentable over Hammer et al. '886 in view of Borodaev et al. with evidence by Hammer et al. '634.

Hammer et al. '886 do not disclose a copolymer comprising "unsaturated carboxylic acids" as recited in claim 1. Hammer et al. '886 only disclose "unsaturated carboxylic acids of the formula IV" (see col. 5, ll. 22-26). It should be noted that R<sup>7</sup> in formula IV is, among other things, a trialkyl-ammonium radical, but not a hydrogen atom. Formula IV is therefore an *ester* of an unsaturated carboxylic acid, rather than a (free) carboxylic acid. The Examiner cites col. 4, ll. 4-29 of Hammer et al. '634 as a showing that the term "unsaturated carboxylic acid" as used in Hammer et al. '886 encompasses  $\alpha,\beta$ -unsaturated carboxylic acids, such as acrylic acid or methacrylic acid. Applicant respectfully submits that this assertion is incorrect. The teaching of Hammer et al. '886 is clear and consistent in itself. Hammer et al. '886 do not simply disclose "unsaturated carboxylic acids", but rather "unsaturated carboxylic acids of formula IV," and formula IV shows an ester. Therefore, one cannot apply the disclosure of Hammer et al. '634 to that of Hammer '886 et al. to arrive at a teaching of a copolymer unsaturated carboxylic acids.

Furthermore, the cellulosic casing as disclosed by Hammer et al. '886 is not comparable with the cellulosic casing of Hammer '634. Hammer et al. '634 teach a cellulosic casing having a coating on its outside. The coating serves to inhibit mold growth on the outside of the casing. It is preferably made up of "elastic, non-adhesive, random copolymers based on hydrophilic vinyl monomers, such as acrylic acid, methacrylic acid, acrylates [= acrylic acid esters], methacrylates [= methacrylic acid esters] or vinyl alcohol esters, wherein the ester proportion quantitatively predominates." In the cellulosic casing of Hammer et al. '886, the ester of formula IV is incorporated in the cellulose matrix, and is not coated on the surface in a subsequent step, as in Hammer et al. '634. One of ordinary skill in the art would not consider the teaching of Hammer et al. '634 regarding the composition of a coating on the outside of a casing to be instructive regarding a composition to be incorporated in the cellulose matrix of Hammer et al. '886.

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The Examiner relied upon Borodaev et al. as teaching a casing comprising a copolymer with units of vinylpyrrolidone and  $\alpha,\beta$ -unsaturated carboxylic acids for the purpose of providing the casing with good hydrophilic and mechanical properties. However, the teaching of Borodaev et al. is limited to polyamide casings comprising such a copolymer, whereas in the claimed invention, the copolymer is in *admixture* with cellulose hydrate. In fact, Borodaev et al. do not contemplate cellulosic casings or casings containing any cellulosic material. Polyamide films and cellulosic films show completely different properties and are intended for different purposes. Therefore, a person of ordinary skill in the art would not have been motivated to employ the copolymers of Borodaev et al. in a cellulosic casing. For example, the polyamide casing of Borodaev et al. is said to provide a high oxygen barrier (p. 4, l. 4). The presently claimed cellulosic casing does not have such barrier properties. It is hence suitable for air-ripened dry or semi-dry sausage (specification, p. 4, para. [0008]).

For at least the above reasons, claims 1-4, 6-12, 15 and 17 are allowable over the disclosures of Hammer et al. '886, Borodaev et al. and Hammer et al. '634.

*II. Rejection of claims 13 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. '886 in view of Borodaev et al. and Crevasse (US 5,215,495) with evidence by Hammer et al. '634*

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 13 and 16 as being unpatentable over Hammer et al. '886 in view of Borodaev et al. and Crevasse with evidence by Hammer et al. '634.

Claim 13 depends from claim 1, and recites that the casing is shirred to form a shirred stick. Claim 16 depends from claim 1, and recites a sausage comprising the food casing of claim 1. As stated above, Hammer et al. '886, Borodaev et al. and Hammer et al. '634 do not teach or suggest the food casing of claim 1. Crevasse fails to teach or suggest the subject matter of claim 1 that is lacking in Hammer et al. '886, Borodaev et al. and Hammer et al. '634. Therefore, claims 13 and 16 are allowable.

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Additionally, with respect to claim 13, Crevasse fails to teach or suggest a shirred casing. Crevasse discloses a stick of fiber-reinforced cellulose casing which is overwrapped by a sleeve (see Fig. 5). The casing is preferably only long enough to encase a single sausage (so-called "one-piece casing"; see col. 3, l. 50 - 55). Therefore, any combination of the teachings of Hammer et al. '886 with those of Borodaev et al., Hammer et al. '634 and Crevasse does not amount to a teaching or suggestion of a shirred casing.

For at least the above reasons, claims 13 and 16 are allowable.

*III. Rejection of claims 18-19 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. '886*

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 18 and 19 as being unpatentable over Hammer et al. '886.

Claim 19 is canceled.

Claim 18, as amended, recites an additive in admixture with cellulose hydrate, wherein the additive comprises a copolymer comprising units of vinylpyrrolidone and units of at least one comonomer, said comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and  $\alpha,\beta$ -ethylenically unsaturated carboxylic acid. As stated above with regard to claim 1, Hammer et al. '886 fails to teach or suggest the claimed copolymers in admixture with cellulose hydrate. Therefore, claim 18 is allowable.

*IV. Rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. '886 in view of Hammer et al. '634*

Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1 as being unpatentable over Hammer et al. '886 and Hammer et al. '634.

As discussed in detail above, Hammer et al. '886 do not disclose copolymers comprising units of unsaturated carboxylic acids, but rather copolymers comprising units

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of esters of unsaturated carboxylic acids. The Examiner cites Hammer et al. '634 as teaching a casing comprising a copolymer with units of  $\alpha,\beta$ -unsaturated carboxylic acids, such as acrylic acid or methacrylic acid. Hammer et al. '634 do disclose such copolymers, but the copolymers do not comprise units of vinylpyrrolidone, as claimed. Furthermore, in the disclosure of Hammer et al. '634, the copolymers are employed to form a coating on the outside of a fiber-reinforced cellulose casing. The copolymer is thus not "in admixture with cellulose hydrate," as recited in present claim 1.

For at least the above reasons, claim 1 is allowable over Hammer et al. '886 and Hammer et al. '634.

*V. Rejection of claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Hammer et al. '634*

Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1 as being unpatentable over Hammer et al. '634. As previously discussed, claim 18 has been amended to recite that the additive is a vinylpyrrolidone copolymer which is in admixture with cellulose hydrate. Hammer et al. '634 only disclose a fiber-reinforced casing having an outer coating of a copolymer, which does not comprise units of vinylpyrrolidone. Thus, Hammer et al. '634 fail to teach or suggest a cellulosic casing having a vinylpyrrolidone copolymer additive which is in admixture with cellulose hydrate, as recited in claim 18.

For at least the above reasons, claim 18 is allowable over Hammer et al. '634.

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**CONCLUSION**

Applicant believes the application is in condition for allowance. Favorable consideration of the application in the form of a Notice of Allowance is therefore respectfully requested. However, any comments or questions concerning the application can be directed to the undersigned at the telephone number given below.

Applicant does not believe any fees are due at this, however, the Commissioner is authorized to charge any deficiency in fees or credit any overpayments to Deposit Account No. 09-0528 (Docket #: P179 1130.1).

Respectfully submitted,

Date:

12/04/07

  
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